

Name:

Date:

# The Model Diatom World Championships

Introduction: Diatoms are plankton. Planktonic organisms are not able to propel themselves in the water. As a result, they are at the mercy of the currents and tides. In order to remain alive, diatoms must remain within three feet of the surface of the water. If they sink below that depth, they will die.

In this lab, you will design a diatom and see how well it floats in a column of water. Whoever floats the longest will be crowned **Model Diatom World Champion**.

Procedure:

1. Obtain a piece of clay from your instructor.
2. Working with a partner, develop a design for your diatom. Make sure your diatom will fit in the water column provided.
3. Draw your design below:
  
  
  
  
  
  
  
  
  
  
4. After the championship, answer the following questions:
  - a. How long did your diatom remain floating?
  
  
  
  
  
  - b. Do you think your diatom design was successful, why or why not?
  
  
  
  
  
  - c. How long did the champion diatom remain floating?
  
  
  
  
  
  - d. Why was the champion diatom so successful? What features did it possess to help it remain afloat?
  
  
  
  
  
  - e. Why did we make our diatoms out of clay?
  
  
  
  
  
  - f. What kind of organisms are diatoms? Why do diatoms need to remain at the surface of the water in order to remain alive?